

U.S. Department of Labor Employment and Training Administration



**OCCUPATIONAL CREDENTIALS AND LABOR
MARKET VALUE: LESSONS FROM RESEARCH**

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Credential Resource Guide

(TEGL 15-10, Attachment 2)



Information and resources on credentials

1. Defining Credentials
2. Tools for Identifying Credentials
3. Attributes of Credentials
 - Current Models of Industry-Recognized Stackable Credentials
4. Acquiring and Leveraging Credentials
 - Credit for Prior Learning

VARIETY OF CREDENTIALS



- **Educational** diplomas, certificates and degrees
- Registered **apprenticeship** certificates;
- Occupational **licenses** (typically awarded by State government agencies)
- Personnel **certifications** from industry or professional associations
- Other skill **certificates** for specific skill sets or competencies within one or more industries or occupations

Attributes of Career-Enhancing Credentials



- Industry-recognized
- Stackable
- Portable
- Quality/Accredited
- Labor Market Value

Industry-Recognized Credentials



- 3 Industry examples
 - Advanced Manufacturing
 - Energy
 - Information Technology
- “Stacking” often based on industry competency models

Quality and Labor Market Value of Credentials

6

- Accredited
- Third-party endorsed
- Linked to Job Corps training
- Aligned with Career Technical Education programs of study and pathways
- **In-demand by business**
 - Job postings
 - Other input

Major Accreditation Organizations for Personnel Certifications



The American National Standards Institute (ANSI)

- Provides accreditation of personnel certifications and certificates
- Maintains a Directory of Accredited Personnel (ANSI/ISO/IEC 17024) Certification Bodies, Applicants and Suspended Certification Bodies available online

The Institute for Credentialing Excellence (ICE)/ National Commission for Certifying Agencies (NCCA)

- Provides accreditation of personnel certifications and certificates
- Maintains a listing of Accredited Certification Programs at: ICE/NCCA also has recently begun a program to accredit Personnel Certificates



CREC

CENTER FOR
REGIONAL ECONOMIC
COMPETITIVENESS

(8)

- U.S. Manufacturing Jobs: Where Companies Are Hiring
- November 2011
- http://www.creconline.org/updatesDetail.asp?News_Id=22

Key Findings

- **Only seven percent** of available manufacturing jobs **identified a specific certification requirement.** Where certifications were required for manufacturing jobs, many related to lean manufacturing.

Find Credentials

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- **Occupational License**

- Right to Practice
- Issued by government entity

- **Personnel Certification**

- Attest to skill attainment
- Issued by industry associations, product developers

CareerOneStop Credential Tools

http://www.careerinfo.net.org/careertools_intro.asp?id=14&nodeid=14

[Explore Careers](#) : [Salary + Benefits](#) : [Education + Training](#) : [Job Search](#) : [Resumes + Interviews](#) : [People + Places to Help](#)
[browse occupations](#) : [explore green careers](#) : [help a job seeker](#) : [salary info](#) : [write job descriptions](#) : [military transition](#) : [disaster recovery services](#)

Explore Careers

[Home](#) > [Career InfoNet](#) > Career Tools
America's Career InfoNet

[Printer-Friendly Version](#)

Career Tools

- [Career Exploration](#)
Navigate the CareerOneStop web site as part of the career exploration process.
- [Career Resource Library](#)
Connect to more than 6,000 links to online career resources.
- [Certification Finder](#)
Learn about occupational certifications and how to acquire them.
- [Education & Training Finder](#)
Locate regional, state and local training and education opportunities by occupation.
- [Employability Checkup](#)
Understand career prospects before making a job change.
- [Employer Locator](#)
Find a specific employer or create lists of employers for a job search.
- [Financial Aid Advisor](#)
Find funding options to pay for education and training.
- [Job Description Writer](#)
Create job descriptions for current employee job reviews or future employees.
- [Licensed Occupations](#)
Find out about occupational licensing requirements in each state.

- [mySkills myFuture](#)
- [Worker ReEmployment](#)
- [Census Worker ReEmployment](#)
- [Deepwater Response](#)

[Explore Careers](#) : [Salary + Benefits](#) : [Education + Training](#) : [Job Search](#) : [Resumes + Interviews](#) : [People + Places to Help](#)

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Explore Careers

[Home](#) > [Career InfoNet](#) > [Career Tools](#) > [Licensed Occupations](#)
America's Career InfoNet

Licensed Occupations

1 Get Started

2 Select a State or Territory

3 Search Results

4 Next Steps

aboutthisdata:

Licensed information is gathered in each state by Labor Market Information units under a grant from the U.S. Department of Labor. [Read more about licenses.](#)

Get Started

Use the Licensed Occupations tool to find contact information about licenses for careers in your state. States provide this data, therefore CareerOneStop cannot guarantee that this information is comprehensive or accurate. Contact the license agency to verify any information provided here.

Find a License

Search by:

- ☒ License Name
- ☐ License Description
- ☐ Agency
- ☐ All of the above

OR

Browse by:

- [Occupations](#)
- [Agencies](#)

http://www.careerinfonet.org/licensedoccupations/lois_keyword.asp?nodeid=16&by=keyword

Licensed Occupations for LPN

Licensed Occupations

1 [Start Over](#)

2 [Select a State or Territory](#)

3 [Select an Occupation](#)

4 [Search Results](#)

5 [Next Steps](#)

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relatedlinks:

[Licensed Occupations Help Workforce Credentials Information Center](#)

< [go back](#)

[continue](#) >

Licensed Occupation Search Results

Your Selections

Below is a list of licenses that match your selections. Select a license below for detailed information.

Location(s) - All States [Change Location\(s\)](#)

Occupation(s) - Licensed Practical and Licensed Vocational Nurses [Change Occupation\(s\)](#)

Displaying Licenses 1-25 of 52 1 2 3 [Next](#)

Occupation	License Name	Licensing Agency	State
Licensed Practical and Licensed Vocational Nurses	Nurse, Licensed Practical	AL Board of Nursing National Council Licensure Examination for Practice	Alabama
Licensed Practical and Licensed Vocational Nurses	Nurse, Licensed Practical	Alaska Department of Commerce, Community & Economic Development Division of Corporations, Business, and Professional Licensing Alaska Board of Nursing	Alaska
Licensed Practical and Licensed Vocational Nurses	Licensed Practical Nurse (License)	Nursing, Arizona State Board of	Arizona
Licensed Practical and Licensed Vocational Nurses	Licensed Practical Nurse (LPN)	Arkansas State Board of Nursing	Arkansas
Licensed Practical and Licensed Vocational Nurses	Licensed Vocational Nurse	Department of Consumer Affairs Board of Vocational Nursing & Psychiatric Techs	California
Licensed Practical and Licensed Vocational Nurses	Licensed Practical Nurse	Board of Nursing	Colorado



Lost Your Job?

Get help at these sites

- [mySkills myFuture](#)
- [Worker ReEmployment](#)
- [Census Worker ReEmployment](#)
- [Deepwater Response](#)

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Explore Careers

[Home](#) > [Career InfoNet](#) > [Career Tools](#) > Certification Finder
America's Career InfoNet

Certification Finder

1 Get Started

2 Certification Search Results

3 Next Steps

aboutthisdata:

Data are compiled and maintained by CareerOneStop and exclusively available on the CareerOneStop site. Read more about [certifications](#).

relatedlinks:

Get Started

Certifications are examinations that test or enhance your knowledge, experience, or skills in an occupation or profession. This directory allows you to search for certifications by keyword, industry, or occupation.

Find a Certification

Enter Keyword

Search by

- ☒ Certification Name
- ☐ Certifying Organization
- ☐ Occupation (or, browse a list of [occupations](#))
- ☐ Industry (or, browse a list of [industries](#))

[search](#)



http://www.careerinfonet.org/certifications_new/default.aspx

Enhancements to CareerOneStop Certification Finder tool



FOUR NEW ICONS TO INDICATE:

- 1. ACCREDITED BY ANSI**
- 2. ACCREDITED BY NCCA**
- 3. AFFILIATED WITH JOB CORPS TRAINING**
- 4. THIRD-PARTY INDUSTRY ENDORSED (E.G. NAM STACKABLE CREDENTIAL, ETC.)**

1 [Start Over](#)

2 **Certification Search Results**

3 [Next Steps](#)

aboutthisdata:

This list of workplace certifications is collected and maintained by CareerOneStop. [Read more about certifications.](#)

A This certification is accredited by ANSI. [Read more about ANSI.](#)

I This certification is third-party industry-endorsed. [Read more about endorsement.](#)

J This certification is related to Job Corps training programs. [Read more about Job Corps.](#)

N This certification is accredited by NCCA. [Read more about NCCA.](#)

relatedlinks:

[Certification Finder Help](#)
[Workforce Credentials Information Center](#)

[< go back](#)

[continue >](#)

Certification Search Results

Selected Criteria

Your Occupation Search Criteria Resulted in **28 Certification(s)** from **16 Organization(s)**.

Your Occupation : **Cardiovascular Technologists and Technicians** [Change Occupation](#)

Displaying Certifications 1-25 of 28 **1 2** [Next](#)

Certification Name	Certifying Organization
Common	
Certification in Clinical Perfusion	American Board of Cardiovascular Perfusion
ECG Technician	American Certification Agency for Healthcare Professionals
Registered Vascular Technologist A N	American Registry of Diagnostic Medical Sonographers
EKG (Electrocardiography) Technician Paramedical Insurance Examiner	American Society of Phlebotomy Technicians
Certified Cardiographic Technician Certified Rhythm Analysis Technician	Cardiovascular Credentialing International
Biomedical Electronics Technician	ETA International
Registered Pulmonary Function Technologist N	National Board for Respiratory Care
ECG Technician	National Center for Competency Testing
Certified EKG Technician J	National Healthcareer Association
Nuclear Cardiology Technologist	Nuclear Medicine Technology Certification Board
Advanced	
Diplomate of American Board of Vascular Medicine	American Board of Vascular Medicine
Advanced Cardiac Life Support Certification	American Phlebotomy Association
Specialty	
Subspecialty Certification in Cardiac Surgery N	American Association of Critical-Care Nurses
Certified Electroencephalographic Technologists	American Board of Registration of Electroencephalography and Evoked Potential Technologists

CareerOneStop
Certification
Finder

Certification Finder

1 [Start Over](#)

2 Certification Search Results

3 [Next Steps](#)

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N This certification is accredited by NCCA. [Read more about NCCA.](#)

relatedlinks:

[Certification Finder Help](#)

[Workforce Credentials Information](#)

[go back](#)

[continue](#)

Certification Search Results

Selected Criteria

Your Industry Search Criteria Resulted in 49 Certification(s) from 5 Organization(s).

Your Industry : **Primary Metal Manufacturing** [Change Industry Sub-Sector](#)

Displaying Certifications 1-25 of 49 1 2 [Next](#)

Certification Name

Certifying Organization

Common

[Machining Level I - Measurement, Materials and Safety Job](#) **I**

[Machining Level I - Planning, Benchwork, and Layout](#) **I**

[Machining Level I - Manual Milling](#) **I**

[Machining Level I - Manual Drill Press Operations](#) **I**

[Machining Level I - Manual Surface Grinding](#) **I**

[Machining Level I - Manual Turning Between Centers](#) **I**

[Machining Level I - Manual Turning with Chucking](#) **I**

[Metalforming Level I](#) **J**

[Machining Level I - CNC Milling: Programming Setup & Operations](#) **I**

National Institute for Metalworking Skills

Tools to Identify Credentials



- ETA has introduced new online tools:
- www.mySkillsmyFuture.org to assist dislocated workers in identifying jobs that use their transferable skills
- www.MyNextMove.org to assist all individuals to explore careers
- It is the easy-to-use, easy-to-read version of O*NET OnLine
- Both link through to related credentials
 - Short-term training (certificate)
 - Apprenticeships
 - Licenses
 - Personnel certifications

What do you want to do for a living?



"I want to be a ..."



Search careers with key words.

Describe your dream career in a few words:

Examples: doctor, build houses

Search



"I'll know it when I see it."



Browse careers by industry.

There are over 900 career options for you to look at. Find yours in one of these industries:

Administration & Support Services

Browse



"I'm not really sure."



Tell us what you like to do.

Answer questions about the type of work you might enjoy. We'll suggest careers that match your interests and training.

Start



Still not sure? Check out careers in these groups:

Bright Outlook

green

REGISTERED
APPRENTICESHIP



My Next Move is created for the U.S. Department of Labor,
[Employment & Training Administration](#),
by the National Center for O*NET Development.



[Certified FISMA Compliance Practitioner](#)

Common

Federal Information Security Management Act
Center

[GIAC Assessing Wireless Networks](#)

Common

[GIAC Certified Firewall Analyst](#)

[GIAC Certified Incident Handler](#) ^A

[GIAC Certified Intrusion Analyst](#) ^A

[GIAC Information Security Fundamentals](#)

[GIAC Security Essentials Certification](#) ^A

[AIS - HP NonStop Systems](#)

Common

[AIS - HP Operations Orchestration v9](#)

[Certified Computer Forensic Technician](#)

Common

Global Information Assurance Certification

**Implementation
for job seeker
customers in
MyNextMove
and mySkills
myFuture**

Hewlett Packard Certification and Learning

High Tech Crime Network LLC

^A This certification is accredited by ANSI. [Read more about ANSI.](#)

^I This certification is third-party industry-endorsed. [Read more about endorsement.](#)

^J This certification is related to Job Corps training programs. [Read more about Job Corps.](#)

^N This certification is accredited by NCCA. [Read more about NCCA.](#)

Competency model clearinghouse



Lost Your Job?

Get help at these sites

- [mySkills myFuture](#)
- [My Next Move](#)
- [Worker ReEmployment](#)
- [Veterans ReEmployment](#)

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[Topics A to Z](#)

Site Search



State Job Banks



More Resources:

America's Career InfoNet



2



1



3



2



[Using Competency Models](#) : [Find Resources](#) : [Users Showcase](#) : [Industry Competency Models](#) : [Tools](#)

Competency Model

[Industry competency models](#) promote an understanding of the skill sets and competencies that are essential to educate and train a globally competitive workforce.

Sponsored by the [U.S. Department of Labor](#), the Competency Model Clearinghouse provides validated industry competency models and [tools](#) to build a custom model and career ladder/lattice for your industry.

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- ▶ [Build a Model](#)
- ▶ [Build a Career Ladder/Lattice](#)

using competency models

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[Building Block Models](#)
[Technical Assistance Guide](#)

Industry Competency Models

Advanced Manufacturing
Aerospace

Tools



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Online interactive tools to customize

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Build a Model

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helpline:

General Instructions

- [Competency Model](#)
- [Career Ladder/Lattice](#)
- [Frequently Asked Questions](#)


Collaborative Process

- [Competency Model](#)
- [Career Ladder/Lattice](#)

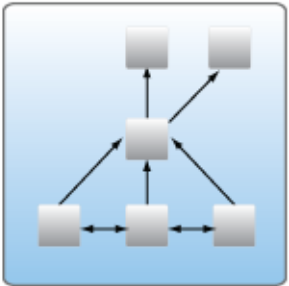
Tutorials

- [Build a Competency Model](#)
- [Build a Career Ladder/Lattice](#)
- [Webinar: Tools for Talent Development](#)

Introduction to the Tools



Build a Competency Model



Build a Career Ladder/Lattice

The Competency Model Clearinghouse offers two tools designed to help businesses, educators, and workforce professionals achieve their talent development goals: the **Build a Competency Model Tool** and the **Build a Career Ladder/Lattice Tool**.

The **Build a Competency Model Tool** will guide you through the development of a competency model that identifies the knowledge, skills, and abilities needed to perform successfully in your industry. Then, the **Build a Career Ladder/Lattice Tool** will help you build career ladders/lattices that outline critical experiences individuals need to progress through a career in your industry.

Follow the links provided on the left side of your screen to review general information about competency models and career ladders/lattices as well as specific information about the tools. You are strongly encouraged to review the instructions and go through the tutorials before building your competency model or career ladder/lattice.

[Get Started >>](#)

Internet addresses



- Certification Finder
 - http://www.careerinfonet.org/certifications_new/default.aspx
- Licensed Occupations Database
 - <http://www.careerinfonet.org/licensedoccupations/loiskeyword.asp?nodeid=16&by=keyword>
- Competency Model Clearinghouse Find Resources Database
 - <http://www.careeronestop.org/competencymodel/search.aspx>
- My Next Move – www.MyNextMove.org
- mySkills myFuture – www.mySkillsmyFuture.org

Thank you!

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Certificate Programs: Findings From Research

TAACCT Grantees Conference
Washington DC
February 21, 2012



Increasing Certificate Awards



- 1. Certificate awards of all lengths in the U.S. reached 815,334 in 2009, tripling over 15 years from 287,642 in 1994.**
- 2. While much of increase came in awards for short-term programs, awards for programs of one year or more than doubled.**
- 3. However, the 15-year pace of increase in certificate awards has slowed over the past five or six years, especially in awards for programs of one year or more.**
- 4. This slowdown can be attributed in major part to relatively flat growth in production of long-term awards among public two-year colleges.**
- 5. This trend is troublesome because these long-term awards result in labor market returns while short-term awards do not.**

15 Years of Sub-Baccalaureate Certificate Awards: All institutional Sectors



Certificate by Length	2009		2004		1999		1994	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less Than 1 Year	219,099	59.5	169,765	56.3	92,136	45.2	81,529	42.2
More Than 1 Year	148,837	40.4	132,032	43.7	111,609	54.8	111,584	57.8
Total	376,936	100.0	301,797	100.0	203,745	100.0	191,113	100.0

15 Years of Sub-Baccalaureate Certificate Awards

Public 2-year Colleges Only



Certificate by Length	2009		2004		1999		1994	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less Than 1 Year	435,733	53.4	338,465	51.5	228,973	48.3	118,962	41.4
More Than 1 Year	379,601	46.6	318,896	48.5	244,266	51.6	168,681	58.6
Total	815,334	100.0	657,451	100.0	473,239	100.0	287,642	100.0

Labor Market Returns to Certificates: Research From National Data



- 1. Research from national surveys consistent: one year of study after high school results in earnings significantly above those with no postsecondary.**
- 2. Earnings advantage to one year of study estimated from four to ten percent – earnings and wages rise with credits completed above one year.**
- 3. This research also indicates that postsecondary participation of less than one year has very little earnings return.**
- 4. No evidence that certificate attainment, without regard to length of study, results in higher earnings.**
- 5. It is at least one year of study plus a credential that makes the difference.**

Labor Market Returns to Certificates: Research From State Data



- 1. Several states match student unit records against wage data available through Unemployment Insurance records. State level data is more detailed, more widely available and consistent in finding significant earnings advantage in certificates for programs of one year and more.**
- 2. State level research offers compelling evidence: individuals who complete long-term programs make significantly more money than those who enroll but do not complete.**
- 3. Individuals who complete short-term programs do not make significantly more money than those who enroll but do not complete.**
- 4. That is generally true across all field of study but field of study is important determinant of returns.**

Why Do Long-Term Programs Pay Off?



- 1. Because the program is coherent and the program length allows greater technical and academic rigor.**
- 2. Lead to wider and deeper and more occupationally relevant skill development than is possible in short-term programs.**
- 3. Typically include more math and language skill development, often embedded in an applications framework, than is feasible in short-term programs.**
- 4. Offer an intentionally designed framework for the development of workplace knowledge and behaviors that are sometimes as important to employers as the technical skills.**

Short-term Programs Have a Place, But Not As Platform for Career Entry



- 1. Short-term program tend to be sharply focused on a narrower range of vocational skills and workplace competencies.**
- 2. Time and pedagogy do not easily permit the development of applied math, reading and writing skills.**
- 3. Limited instructional time does not facilitate engagement with other students, faculty, and staff that can shape workplace behaviors.**
- 4. Many of the short-term programs were not designed to establish foundational skills in an occupation or to build a platform for long-term occupational mobility.**
- 5. Rather, their purpose more often is to update skills or to introduce newer technologies and business practices to workers who already have an established foundation and experience in their occupation.**

Stackable Certificates: A Word of Caution



- 1. Some colleges de-constructing longer-term programs into three or four linked short-term programs, building “stackable” certificates.**
- 2. Argument for this: students who fail to complete the longer programs could be awarded credentials for completion of big chunks of the program within a pathway. Long-term programs seem daunting to students who work and have family responsibilities while short-term programs can be tied together into career-focused occupational pathway.**
- 3. In theory, students can complete several of these stepping-stone programs at a slow and gradual pace that works for them.**

But....



- 1. There is yet no data to support this theory – no evidence that students actually are stacking short-term certificates and building them into longer-term certificates or degree.**
- 2. Moreover, most of these short-term programs do not independently offer adequate labor market returns that will pay off for students.**
- 3. If you are going to stack, make sure each chunk has solid labor market returns.**
- 4. And, don't stop stop re-structuring the longer term programs in ways that promote completion.**

Market Segmentation Between Public and For-Profit Institutions is Concerning



- 1. Accelerating segmentation as for-profit sector focus on long-term certificates and community colleges on short-term is not good for low-income youth and working adults.**
- 2. At for-profit institutions, the long-term certificate programs that lead to good jobs can be three to four times more expensive than they might be at the community colleges.**
- 3. Students typically incur high levels of debt as they seek these credentials that, if available at far more affordable prices in the public community colleges, might not require debt at all.**

Certificate Programs of Study Designed for Completion



- 1. The research on certificates strongly suggests that the labor market return to students is shaped not merely by student persistence in credit accumulation but by assuring that students complete and intentionally designed, coherent programs of study that develop occupational knowledge.**
- 2. One of the important advantages of one-year programming is that it permits (encourages) greater reliance on integrated program design, cohort enrollment, block scheduling, embedded remediation, and built-for-completion sequencing.**